

## IN THE SPECIFICATION

Please insert the following paragraphs on page 18, line 12.

An embodiment of the invention includes a stent and a means for enhancing microwave radiation that is scattered from the stent, where the means produces a larger scattered microwave radiation field over that which would occur from the stent absent the means. The means can comprise a dimension that is tuned to maximize the detection of in-stent restenosis. The means can comprise a dimension that is tuned for at least one microwave frequency. The stent can comprise a cylindrical axis, and the means can comprise a gap along said cylindrical axis. This gap can comprise a dimension that is tuned for at least one desired frequency.

An embodiment of the invention includes a stent and a microwave transmitter or microwave receiver operatively connected to the stent, where the microwave transmitter is configured for transmitting microwave radiation to the stent to produce scattered microwave radiation, and where the microwave receiver is configured for receiving data comprising microwave radiation scattered from the stent. This embodiment can further comprise means for enhancing microwave radiation that is scattered or reflected from the stent, where the means produces a larger scattered or reflected microwave radiation field over that which would occur from the stent absent the means. The means can comprise a dimension that is tuned to maximize the detection of in-stent restenosis. The means can comprise a dimension that is tuned for at least one

microwave frequency. The stent can comprise a cylindrical axis, where the means comprises a gap along the cylindrical axis. The gap can comprise a dimension that is tuned for at least one desired frequency.

An embodiment of the invention includes a stent and means for enhancing microwave radiation that is scattered from the stent, where the means produces a larger scattered microwave radiation field over that which would occur from the stent absent the means and further comprises a microwave transmitter for transmitting microwave radiation to the stent, where the stent produces scattered or reflected microwave radiation and further comprises a microwave receiver for receiving data comprising the scattered or reflected microwave radiation and further comprises computer hardware with software comprising an algorithm for analyzing the data to determine whether in-stent restenosis has occurred, where the software further comprises an algorithm for analyzing the data to quantify the amount of in-stent restenosis that has occurred and further comprises an alarm, the apparatus further comprising a wireless transmitter operatively connected to the computer hardware, wherein the algorithm notifies a selected contact if in-stent restenosis exceeds a pre-set level.

An embodiment includes a stent and a microwave transmitter or microwave receiver operatively connected to the stent, where the microwave transmitter is configured for transmitting microwave radiation to the stent to produce scattered microwave radiation, and where the microwave receiver is configured for receiving data comprising microwave radiation scattered from the

stent, the invention further comprising computer hardware with software comprising an algorithm programmed to perform a task selected from the group consisting of (i) analyzing the data to determine whether in-stent restenosis has occurred and (ii) analyzing the data to quantify the amount of in-stent restenosis that has occurred, the invention further comprising an alarm, and further comprising a wireless transmitter operatively connected to the computer hardware, where the algorithm notifies a selected contact if in-stent restenosis exceeds a pre-set level.

An embodiment includes a microwave receiver operating frequency range of 0.1 to 50 GHz.